

Notice of Allowability

Application No.

10/502,056

Examiner

Chukwuma O. Nwaonicha

Applicant(s)

KUHRS ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/28/2005.
2. ☒ The allowed claim(s) is/are 16-32 (now renumbered 1-17, respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


JOHANN RICHTER
SUPERVISORY PATENT EXAMINER
GROUP 16

DETAILED ACTION

Current Status

1. This action is responsive to Applicants' Remarks of 28 December 2005.
2. Claims 16-32 are under active consideration in the instant application.
3. The 102 and 103 rejections have been withdrawn following applicants' amendment.

The Examiner has rejoined and examined the withdrawn claims 27-32.

Allowed Claims

Claims 16-32 are allowable over the prior art of record.

Reason For Allowance

The following is an examiner's statement of reasons for allowance: Applicants' claim a catalyst composition for the oxychlorination of ethylene, comprising a mixture of metal salts on a support, wherein said metal salts are applied to the support in such ratios that the catalyst composition comprises a) from 3 to 12% by weight of copper as copper salt, b) from great than 0 to 3% by weight of an alkaline earth metal as alkaline earth metal salt, c) from great than 0 to 3% by weight of an alkali metal as alkali metal salt, d) from 0.001 to 0.1% by weight of at least one metal selected from the group consisting of ruthenium, rhodium, palladium, osmium, iridium and platinum, and/or from 0.0001 to 0.1% by weight of gold, as corresponding metal salt or tetrachloroauric acid, and wherein all percentages by weight are based on the total weight of the catalyst including support material; wherein all the other variables are as defined in the claims.

The composition was neither found to be obvious nor anticipated by the prior art of record.

The closest prior art is SUMITOMO CHEMICAL COMPANY LIMITED, {EP 0 577 059 A1}. EP 0 577 059 A1 teaches an oxychlorination catalyst comprising a carrier material, copper salt from 0.05 to about 40% by weight of copper, vanadium salt from 0.05 to about 40% by weight of vanadium, palladium salt from 0.05 to about 40% by weight of palladium and alkaline earth metal compound which are supported on the carrier. However, applicants argue that their claims (claims 16-32) recite a catalyst composition for the oxychlorination of ethylene, comprising a mixture of metal salts on a support comprising; a) copper as copper salt, b) an alkaline earth metal as alkaline earth metal salt, c) an alkali metal as alkali metal salt, d) at least one metal selected from the group consisting of ruthenium, rhodium, palladium, osmium, iridium and platinum, and/or gold. Applicants contend that there is a big difference between the present invention and EP 0 577 059 A1, that is, according to the present invention the molar ratio of copper: palladium has to be at least 30:1, whereas according to EP 0 577 059 A1 the catalyst can comprise an excess of palladium. Applicants further argue that the prior art does not disclose a catalyst composition for the oxychlorination of ethylene as claim by applicants. Therefore, a prima facie case of obviousness has not been established.

Applicants' argument is found persuasive because this difference is not readily apparent and would not have been suggested to one of ordinary skill.

A search of the prior art failed to uncover any reference that teaches or motivates one of ordinary skill to disclose a catalyst composition for the oxychlorination of ethylene as claim by applicants.

All claims (16-32) are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chukwuma O. Nwaonicha whose telephone number is 571-272-2908. The examiner can normally be reached on Monday thru Friday, 8:30am to 5:00pm.

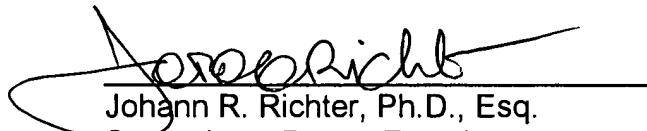
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

Chukwuma O. Nwaonicha, Ph.D.
Patent Examiner
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